You are invited to attend a new series of "brown bag" seminars on the second Thursday of every month, starting in January 2001. The series is cosponsored by the National Renewable Energy Laboratory (NREL) and the U.S. Department of Energy. Topics will focus on new and innovative renewable energy and energy efficiency analysis strategies, models, and technologies that are being developed at NREL.

Energy Analysis Seminar Series

A "brown bag" analytical seminar series

Development of Renewable Energy Strategy through CAA Legislation
David Wooley
January 11, 2001
11:30 – 12:30 p.m.
Renewable energy technologies have matured to point that they can have important clean air benefits. To date, however, clean attributes of renewable energy, have generally gone unrecognized by regulators and uncompensated by markets. A prime example of this problem is that most current air pollution control regulations do not allow renewables to participate fully in emissions trading applicable to the electric power sector. Changes to clean air statutes, regulations and implementation practices could, however provide a powerful stimulus to renewable development. This presentation will describe ways to modify Clean Air controls to create new forms of revenue for wind, solar and biomass.

David Wooley is a partner in the law firm of Young, Sommer, Ward, Ritzenberg, Wooley, Baker & Moore, LLC, Albany, New York. He is very active in environmental consulting.

David Wooley

Representation of Renewable Energy in Models
Walter Short
February 8, 2001
12:00 – 1 p.m.
The treatment of renewable energy in dynamic models is critical to how U.S. policymakers view the potential for renewable energy. To ensure that renewables are well represented, over the last two years NREL has critically evaluated the treatment of wind, photovoltaics in buildings, geothermal, biopower and biofuels in the National Energy Modeling System (NEMS). NEMS was developed by the Energy Information Administration and is used to conduct policy analysis for DOE. NREL's evaluation has led to some improvements in NEMS and continuing areas of investigation. This seminar will report on our findings and progress in modifying NEMS for a better representation of renewables.

Walter Short is Principal Policy Advisor at NREL's Energy Analysis Office.

Walter Short

Renewable Energy and Real Options Analysis
Graham Davis and Brandon Owens
March 8, 2001
12:00 – 1 p.m.
Innovations in financial theory have led to the development of an investment evaluation framework called real options analysis which brings the discipline of financial markets to bear on strategic investment problems under uncertainty. Since uncertainty is a key driver in the technical development and market adoption of new energy systems, real options analysis is particularly suited to the valuation of renewable energy technologies. In collaboration with the Colorado School of Mines (CSM), NREL is currently using real options analysis in a variety of renewable energy-related applications. In the presentation, the results of two recent real options analysis research efforts will be discussed.

Graham Davis is Associate Professor of Economics and Business at CSM.
Brandon Owens is Senior Analyst at NREL's Energy Analysis Office.

Graham Davis

Future seminar topics

- **Federal Subsidies for RETs**
- **Green Power Tags**
- **Renewables as Disruptive Technologies**

370 L' Enfant Promenade is located adjacent to the Forrestal building at 901 D Street SW in downtown Washington (Aerospace Building). Please contact Wanda Addison at NREL at 202-646-5278 with any questions.

For more information on NREL, please visit the NREL Web site at http://www.nrel.gov/